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Federal Agencies

November 24, 2003

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Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Art Unit: *To Be Assigned*

Re: U.S. Non-Provisional Utility Patent Application  
Appl. No. 10/712,399; Filed: November 14, 2003  
(Continuation-in-Part of 09/955,672; Filed: September 19, 2001)  
For: **Process for the Production of Anhydrosugar Alcohols**  
Inventors: Moore *et al.*  
Our Ref: 1533.3500003/PAJ/T-M

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Information Disclosure Statement;
2. Four pages of Form PTO-1449 citing twenty-three (23) documents; and
3. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents  
November 24, 2003  
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Peter A. Jackman  
Attorney for Applicants  
Registration No. 45,986

PAJ/T-M/nef  
Enclosures

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SKGF Rev. 2/15/02 dcw; 4/18/03 svb



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:  
Moore *et al.*  
Appl. No. 10/712,399  
Filed: November 14, 2003  
For: **Process for the Production of  
Anhydrosugar Alcohols**

Confirmation No. *To be assigned*  
Art Unit: *To be assigned*  
Examiner: *To be assigned*  
Atty. Docket: 1533.3500003/PAJ/T-M

Information Disclosure Statement

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

The Examiner's attention is directed to the following co-pending U.S. patent application: U.S. Patent Application No. 09/955,672; Filed September 19, 2001 and published as Publication No. US 2002/0052516 A1 on May 2, 2002, referenced on Form PTO-1449 as document AII1. The Examiner is respectfully requested to consider this application and the art cited therein during examination.

Copies of documents AL1, AM1, AN1, AR1-AR4, AS1-AS4 and AT1-AT3 were previously cited or submitted to the office in an Information Disclosure Statement in Application No. 09/955,672, filed September 19, 2001. Thus, copies of these documents are not attached. If the Examiner does not have access to the copies of the cited documents, the Examiner is hereby invited to request the copies from the undersigned attorney of record.

Copies of documents **AA1** to **AI1** are not provided in accordance with the U.S. Patent and Trademark Office pre-OG notice of July 11, 2003, which states "[t]he Office hereby waives the requirement under 37 CFR 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003."

In accordance with 37 C.F.R. § 1.98(a)(3), Applicants' undersigned representative submits the following, in regards to non-English language documents **AL1** cited on Form PTO 1449:

Document **AL1**, German Patent No. DE 488 602, is in the German language. An English language abstract of document **AL1** is not readily available. This document was cited in the International Search Report of PCT/US01/142880, filed November 1, 2001, which is the international counterpart to U.S. Patent Application No. 09/955,672, filed September 19, 2001, which is the parent of the captioned application. According to Section 609 of the Manual of Patent Examining Procedure, "[w]here the information listed is not in the English language, but was cited in a search report or other action by a foreign patent office in a counterpart foreign application, the requirement for a concise explanation of relevance can be satisfied by submitting an English-language version of the search report or action which indicates the degree of relevance found by the foreign office." M.P.E.P. §609 (8<sup>th</sup> ed., Rev. 1, Feb. 2003). The International Search Report is cited as **AS4** on the accompanying Form PTO-1449.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the

effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

This Information Disclosure Statement is being filed within three months of the date of filing of a national application other than a continued prosecution application (CPA). No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

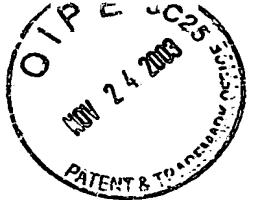
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Attorney for Applicants  
Registration No. 45,986

Date: Nov. 24, 2003

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|--|--|--|--|-------------------------------|--|
| FORM PTO-1449<br><b>INFORMATION DISCLOSURE STATEMENT</b> |  | ATTY. DOCKET NO.<br>1533.3500003/PAJ/T-M |  | APPLICATION NO.<br>10/712,399 |  |
|  |  | APPLICANT<br>Moore et al.                |  |                               |  |
|  |  | FILING DATE<br>November 14, 2003         |  | GROUP<br>To be assigned       |  |

## U.S. PATENT DOCUMENTS

| EXAMINER INITIAL |     | DOCUMENT NUMBER | DATE       | NAME            | CLASS | SUB-CLASS | FILING DATE |
|------------------|-----|-----------------|------------|-----------------|-------|-----------|-------------|
|                  | AA1 | 3,160,641       | 12/08/1964 | Hartmann        |       |           | 08/07/1961  |
|                  | AB1 | 3,454,603       | 07/08/1969 | Hartmann        |       |           | 05/18/1966  |
|                  | AC1 | 4,297,290       | 10/27/1981 | Stockburger     |       |           | 07/17/1980  |
|                  | AD1 | 4,408,061       | 10/04/1983 | Salzburg et al. |       |           | 03/11/1982  |
|                  | AE1 | 4,506,086       | 03/19/1985 | Salzburg et al. |       |           | 06/20/1983  |
|                  | AF1 | 4,564,692       | 01/14/1986 | Feldmann et al. |       |           | 07/18/1983  |
|                  | AG1 | 4,861,513       | 08/29/1989 | Lueders et al.  |       |           | 10/09/1987  |
|                  | AH1 | 2002/0002291 A1 | 01/03/2002 | Bhatia          |       |           | 05/24/2001  |
|                  | AI1 | 2002/0052516 A1 | 05/02/2002 | Moore et al.    |       |           | 09/19/2001  |
|                  | AJ  |                 |            |                 |       |           |             |
|                  | AK  |                 |            |                 |       |           |             |

## FOREIGN PATENT DOCUMENTS

| EXAMINER INITIAL |     | DOCUMENT NUMBER | DATE       | COUNTRY       | CLASS | SUB-CLASS | TRANSLATION |
|------------------|-----|-----------------|------------|---------------|-------|-----------|-------------|
|                  | AL1 | DE 488 602      | 12/12/1929 | Germany       |       |           | Yes<br>X No |
|                  | AM1 | GB 600 870      | 04/21/1948 | Great Britain |       |           | Yes<br>No   |
|                  | AN1 | WO 00/14081     | 03/16/2000 | WIPO          |       |           | Yes<br>No   |
|                  | AO  |                 |            |               |       |           | Yes<br>No   |
|                  | AP  |                 |            |               |       |           | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|    |   |  |
|----|---|--|
| AR | 1 | Bahulayan, D., and Sreekumar, K., "Chiral polyesters with azobenzene moieties in the main chain, synthesis and evaluation of nonlinear optical properties," <i>J. Mater. Chem.</i> 9:1425-1429, Royal Society of Chemistry (July 1999) |
| AS | 1 | Bock, K., et al., "Acid Catalyzed Dehydration of Alditols. Part I. D-Glucitol and D-Mannitol," <i>Acta Chem. Scand.</i> 35:441-449, Nordic Chemical Societies (1981)   |
| AT | 1 | Duclos, A., et al., "A Simple Conversion of Polyols into Anhydroalditols," <i>Synthesis</i> 10:1087-1090, Georg Thieme Verlag (1994)   |

| EXAMINER | DATE CONSIDERED |
|----------|-----------------|
|          |                 |

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



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|                  | AA |                 |      |      |       |           |             |
|                  | AB |                 |      |      |       |           |             |
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|                  | AD |                 |      |      |       |           |             |
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|                  | AF |                 |      |      |       |           |             |
|                  | AG |                 |      |      |       |           |             |
|                  | AH |                 |      |      |       |           |             |
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|------------------|----|-----------------|------|---------|-------|-----------|-------------|
|                  | AL |                 |      |         |       |           | Yes<br>No   |
|                  | AM |                 |      |         |       |           | Yes<br>No   |
|                  | AN |                 |      |         |       |           | Yes<br>No   |
|                  | AO |                 |      |         |       |           | Yes<br>No   |
|                  | AP |                 |      |         |       |           | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|  |    |   |   |
|--|----|---|---|
|  | AR | 2 | Fléche, G., and Huchette, M., "Isosorbide. Preparation, Properties and Chemistry," <i>Starch</i> 38:26-30, VCH Verlagsgesellschaft mbH (1985)   |
|  | AS | 2 | Goodwin, G., et al., "Preparation of bicyclic hexitol anhydrides by using acidic cation-exchange resin in a binary solvent. <sup>13</sup> C-NMR spectroscopy confirms configuration inversion in chloride displacement of methanosulfonate in isomannide and isosorbide derivatives," <i>Carb. Res.</i> 79:133-141, Elsevier Scientific Publishing Company (1980) |
|  | AT | 2 | Koch, H., et al., "New Industrial Products from Starch," <i>Starch</i> 40:128-129, Wiley-VCH (1988)   |

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|                  | AA |                 |      |      |       |           |             |
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|                  | AL |                 |      |         |       |           | Yes<br>No   |
|                  | AM |                 |      |         |       |           | Yes<br>No   |
|                  | AN |                 |      |         |       |           | Yes<br>No   |
|                  | AO |                 |      |         |       |           | Yes<br>No   |
|                  | AP |                 |      |         |       |           | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|  |    |   |  |
|--|----|---|--|
|  | AR | 3 | Marr, A., et al., "Synthesis and structure of 1,4:3,6-dianhydro-2-O-p-tosyl-D-mannitol," <i>J. Chem. Crystal.</i> 27:161-166, Plenum Publishing Corporation (1997) |
|  | AS | 3 | Stoss, P., et al., "1,4:3,6-Dianhydrohexitols," <i>Adv. Carbohydr. Chem. Biochem.</i> 49:93-173, Academic Press (1991)   |
|  | AT | 3 | Wiggins, L.F., "The Anhydrides of Polyhydric Alcohols. Part I. The Constitution of isoMannide," <i>J. Chem. Soc.</i> 4-6, American Chemical Society (1945)         |

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|                  | AG |                 |      |      |       |           |             |
|                  | AH |                 |      |      |       |           |             |
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|                  | AO |                 |      |         |       |           | Yes<br>No   |
|                  | AP |                 |      |         |       |           | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|  |    |   |  |
|--|----|---|--|
|  | AR | 4 | Wiggins, L.F., "Anhydrides of the Penitols and Hexitols," Adv. Carb. Chem., pp. 191-228, Imperial College of Tropical Agriculture (1950) |
|  | AS | 4 | International Search Report for International Patent Application No. PCT/US01/42880, mailed April 18, 2002                               |
|  | AT |   |  |

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